

## **IN-SITU PLUG FILL**

### **ABSTRACT OF THE DISCLOSURE**

5        A method for forming damascene features in a dielectric layer over a barrier layer over a substrate is provided. A plurality of vias are etched in the dielectric layer to the barrier layer with a plasma etching process in the plasma processing chamber. A patterned photoresist layer is formed with a trench pattern.  
10      Within a single plasma process chamber a combination via plug deposition to form plugs in the vias over the barrier layer and trench etch is provided.